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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,099	11/16/2001	Shih-Hsornng Shen	YMBP0001USA	8068

27765 7590 10/22/2004

NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

NI, SUHAN

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/683,099		SHEN ET AL.	
	Examiner		Art Unit	
	Suhan Ni		2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the amendment filed 07/01/2004.

Drawings

2. The amendment filed 08/18/2003 is objected to, under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The newly added material, which is not supported by the original disclosure is as follows:

At least in newly amended Fig. 2, the newly added limitation is much more than a speaker as in original filed Fig. 2.

Such newly added limitation is also added to specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-2 and 4-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Vaughn et al. (U. S. Pat. - 5,233,665).

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Regarding claims 1, 7, 13 and 15, Vaughn et al. disclose an acoustic device, comprising: an acoustic input signal (20), a plurality of bandpass filters (28) for filtering the acoustic input signal into a plurality of output signals; and a plurality of switches (30, 32) each connected to and controlling a corresponding filter of the plurality of bandpass filters, wherein the switches are capable of being selectively amplifying (34, 35) the output signals as claimed.

Regarding claims 2, 8, 14 and 19, Vaughn et al. further disclose the acoustic device, wherein each of the plurality of bandpass filters receives signal from two signal transformation unit (20) as claimed (Fig 1).

Regarding claims 4, 9-10 and 16-18, Vaughn et al. further disclose the acoustic device, wherein an output signal is amplified by an amplifier (37, 39) and transmitted to a speaker (40) as claimed.

Regarding claims 5, 11 and 20, Vaughn et al. further disclose the acoustic device, wherein the plurality of bandpass filters is formed in a filterbank (28).

Regarding claims 6 and 12, Vaughn et al. further disclose the acoustic device, wherein the device further comprises a microphone (20) for receiving input acoustic signals.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaughn et al. (U. S. Pat - 5,233,665).

Regarding claim 3, Vaughn et al. do not clearly teach the details of the bandpass filter as claimed. Since providing a suitable bandpass filter for a filterbank is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable filter, such as a amplitude-tunable filters for the filterbank of the device, in order to make the device to be more configurable for different user and applications.

Response to Amendment

5. Applicant's arguments dated 07/01/2004 have been fully considered, but they are not deemed to be persuasive.

The cited reference (U. S. Pat. - 5,233,665) does clearly show all the limitation as claimed: an acoustic device, comprising: an acoustic input signal (20), a plurality of bandpass filters (28) for filtering the acoustic input signal into a plurality of output signals; and a plurality of switches (23, 26, 30, 32, 36 or 41) each connected to and controlling a corresponding filter of the plurality of bandpass filters, wherein the switches are capable of being selectively amplifying (34, 35 or 39) the output signals as claimed.

Regarding claims 1-2 and 4-20, the examiner respectfully disagrees with the applicant: in the prior art, the sensor-elements are microphones (20a-b), therefore, the input signal to the filterbank is signal which is obtained by digitizing the acoustic signal received by microphones.

Further, the newly added limitations are all inherent to the previous claims, which fail to render allowable subject matters for placing this application to be allowable.

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Regarding claim 3, the applicants argue no motivation to combine the references. It is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. **In re Sheckler, 168 USPQ 716 (CCPA 1971); In re Mlaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 715 (CCPA 1968).**

Conclusion

6. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any response to this final action should be mailed to:

**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450**

Or faxed to:

**(703) 308-9051, (for formal communications; please mark "EXPEDITED
PROCEDURE"), or**

(703) 305-9508, (for informal or draft communications, please label

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"PROPOSED" or "DRAFT")


Hand-delivered responses should be brought to:

**Receptionist, Sixth Floor,
Crystal Park II,
2121 Crystal Drive,
Arlington, Virginia 22202**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(703)-308-9322**, and the number for fax machine is **(703)-305-9508**. The examiner can normally be reached on Monday through Thursday from 9:00 am to 7:30 pm. If it is necessary, the examiner's supervisor, **Curtis Kuntz**, can be reached at **(703) 305-4708**.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is **(703) 305-3900**.


SUHAN NI
PRIMARY EXAMINER

SN

October 16, 2004